TM 923 - YEAST MORPHOLOGY AGAR

INTENDED USE

For classification of yeasts on the basis of their colonial characteristics and cell morphology.

PRODUCT SUMMARY AND EXPLANATION

Yeasts are ubiquitous in our environment, being found on fruits, vegetables and plant materials. Yeasts are unicellular, eukaryotic, budding cells that are generally round to oval or, less often, elongated or irregular in shape. Colonies of yeasts have a smooth to wrinkled, creamy appearance. Yeast Morphology Agar is formulated as described by Wickerham. The medium plates are inoculated by the Dolmans technique. Using a light inoculum from an actively growing culture, smear a single line at one end of the plate and in two separate points at the opposite end. Place two sterile slides, one on the central section of the smear and one on one of the two-punctiform inoculate. After an incubation of 72-96 hours, take off the growth of the point inoculations and the smear without the slide and observe the morphology of the vegetative cells under a microscope. Also observe the zone underlying the slides for the formation of mycelium or pseudo mycelium under the microscope. Observe the colonial morphology.

COMPOSITION

Ingredients	Gms / Ltr
Ammonium sulphate	3.500
Asparagine	1.500
Dextrose (Glucose)	10.000
L-Histidine monohydrochloride	0.010
DL-Methionine	0.020
DL-Tryptophan	0.020
Biotin	0.000002
Calcium pantothenate	0.0004
Folic acid	0.000002
Inositol	0.002
Niacin	0.0004
p-Amino benzoic acid (PABA)	0.0002
Pyridoxine hydrochloride	0.0004
Riboflavin (Vitamin B2)	0.0002
Thiamine hydrochloride	0.0004
Boric acid	0.0005
Copper sulphate	0.00004
Potassium iodide	0.0001
Ferric chloride	0.0002
Manganese sulphate	0.0004
Sodium molybdate	0.0002
Zinc sulphate	0.0004
Potassium dihydrogen phosphate	1.000

Magnesium sulphate	0.500
Sodium chloride	0.100
Calcium chloride anhydrous	0.100
Agar	18.000

PRINCIPLE

The medium is a highly enriched medium, which provides all the growth factors required by yeasts. Yeast Morphology Agar is employed to study the cellular morphology, formation of mycelia and pseudomycelia and other cultural characteristics. Various media constituents provide carbon, nitrogen, amino acids, vitamins and trace salts required by yeasts.

INSTRUCTION FOR USE

- Dissolve 34.75 grams in 1000 ml purified / distilled water.
- Heat to boiling to dissolve the medium completely.
- Sterilize by autoclaving at 15 psi pressure (121°C) for 15 minutes.
- Cool to 45-50°C. Pour into sterile Petri plates to a depth of 1.5 mm.
- Allow the media surface to dry for one or two days at room temperature.
- Use light inoculum and make a single streak and two point inoculations near the other sides of the plate.

QUALITY CONTROL SPECIFICATIONS

Appearance of Powder : Cream to yellow homogeneous free flowing powder.
Appearance of prepared medium : Light amber coloured slightly opalescent gel forms in Petri plates.
pH (at 25°C) : 5.6±0.2

INTERPRETATION

Cultural characteristics observed after an incubation.

Microorganism	ATCC	Inoculum (CFU/ml)	Growth	Recovery	Morphology	Incubation Temperature	Incubation Period
Candida albicans	10231	10-100	Good	40-50%	Hyphae	25- 30°C	6-7 days
Kloeckera apiculata	9774	10-100	Good	40-50%	-	25- 30°C	6-7 days
Saccharomyces uvarum	9080	10-100	Good	40-50%	-	25- 30°C	6-7 days

PACKAGING:

In pack size of 100 gm bottles.

STORAGE

Dehydrated powder, hygroscopic in nature, store in a dry place, in tightly-sealed containers between 2-8°C and protect from direct sunlight. Under optimal conditions, the medium has a shelf life of 4 years. When the container is opened for the first time, note the time and date on the label space provided on the container. After the desired amount of medium has been taken out replace the cap tightly to protect from hydration.

Product Deterioration: Do not use if they show evidence of microbial contamination, discoloration, drying or any other signs of deterioration.

DISPOSAL

After use, prepared plates, specimen/sample containers and other contaminated materials must be sterilized before discarding.

REFERENCES

1. Isenberg, H.D. Clinical Microbiology Procedures Handbook 2nd Edition.
2. Jorgensen, J.H., Pfaller, M.A., Carroll, K.C., Funke, G., Landry, M.L., Richter, S.S and Warnock., D.W. (2015) Manual Clinical Microbiology, 11th Edition. Vol. 1.
3. Murray P. R., Baron J. H., Pfaller M. A., Jorgensen J. H. and Yolken R. H., (Ed.), Manual of Clinical Microbiology, 8th Ed., 2003, American Society for Microbiology, Washington, D.C.
4. Wickerham L. J., 1951, U.S. Dept. Agric. Tech. Bull. No. 1029.
5. Wickerham L. J., 1939, J. Tropical Med. Hyg. 42:176.
6. Wickerham L. J., 1948, J. Bacteriol., 56:363.
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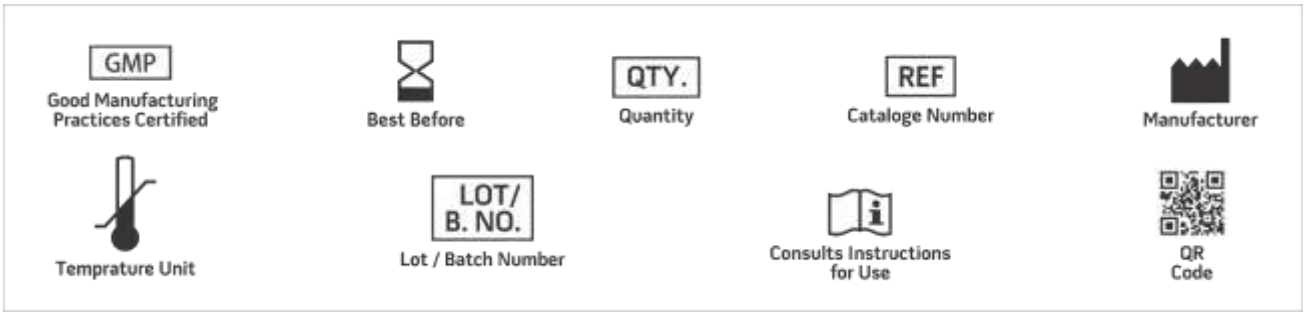

NOTE: Please consult the Material Safety Data Sheet for information regarding hazards and safe handling Practices.

***For Lab Use Only**

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